Amendments To The Specification
(In The Revised Format)

Please replace the last paragraph in the Specification page 20, line 22 to page 21, line 4 with the following amended paragraph:

The process whereby this can be relayed from the mobile to the base station and into the network is shown in ~~Figure 4~~ Figure 4(a) and Figure 4(b), where ID 3 is the originator which then consults its routing table in terms of finding the best gradient to the base station and having identified ID 2, it sends an ORACH message or transmission to ID 2, which duly responds acknowledging receipt and then forwards it through to ID 1, which has the best gradient from it to the base station. Likewise ID 1 sends a message to the base station, at which stage the base station sends a message to the RNC, or Radio Network Controller, which then assigns a channel to the base station for the particular request, thus effectively reserving resources in the fixed infrastructure. The base station then sends the information back via multiple relay hop to the mobile which made the request, giving a forward and reverse link assignment. In this process, ID 2 and ID 1 may set aside relaying resources which they themselves reserve temporarily for ID 3, as does the base station and the network controller. Alternatively, since relays are used opportunely, other IDs apart from ID and ID 2 may be used to relay data to and from ID 3 to the base station.

Please replace the fifth paragraph in the Specification page 21, lines 22-27 with the following amended paragraph:

Before any call set-up procedure is executed all ODMA mobile stations will have executed a probing mechanism to gather neighbours. Once they have carried out sufficient probing they will be able to transmit messages to a NodeB. Thus a typical call set-up procedure is illustrated in ~~Figure 4~~ Figure 4(a) and Figure 4(b). Note that in a pure TDD system the paging messages and synchronization information may easily be obtained from the core TDD infrastructure.

Please replace the sixth paragraph in the Specification page 21, lines 29-30 with the following amended paragraph:

The core set-up procedure illustrated in ~~Figure 4~~ Figure 4(a) and Figure 4(b) is described concisely below:

Please replace the second full paragraph in the Specification page 23, lines 7-19 with the following amended paragraph:

In most telecommunications systems the paging of any mobile stations is governed by ramping up of paging messages over three expanding location areas. These location areas are last known cell, last location area, and finally the entire network with a global page. In ODMA the gradients to all users are not always processed and retained as this

would result in every ODMA node keeping a global routing table of

gradients to every other mobile station with the network, which is not

practical. Thus, to overcome this routeing problem in the mobile station

terminated call set-up procedure the mobile station is initially paged to

allow forward-relaylink routes to be calculated to the destination mobile

station. A time-out T $_{waitroute}$ is used to allow sufficient time for routes to

be gathered back to the source NodeB. Using this mechanism the call

set-up procedure will follow the procedure described below with reference

to ~~Figure 6~~ Figure 6(a) and Figure 6(b).

Please replace the last paragraph in the Specification page 25, line 33 to

page 26, line 2 with the following amended paragraph:

Assuming that the synchronisation information is received from a

beacon TDD transmitter a mobile station originated call set-up procedure

with last hop should follow the procedure described below with reference

to ~~Figure 9~~ Figure 9(a) and Figure 9(b).

Please replace the second paragraph in the Specification page 27, lines

11-13 with the following amended paragraph:

Taking as an example the situation where the paging information is

gathered from the current FDD cell transmissions a MT call set-up

procedure with last hop is described below with reference to ~~Figure 10~~

Figure 10(a) and Figure 10(b).

Please replace the fifth paragraph in the Specification page 28, lines 17-

22 with the following amended paragraph:

The ODMA location update procedure is required to improve the

efficiency of forward-relaylink transmissions to ODMA relay nodes. The

location information is stored in the routeing table that is controlled by the

RRC in the RNC. In the case with a gateway last hop the routeing table

has to take into account of the first hop to the gateway ODMA relay node.

One such location update procedure is shown in ~~Figure 11~~ Figure 11(a)

and Figure 11(b).